

REMARKS

The Office Action dated August 3, 2005 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto. Claims 27, 29, 43 and 45 have been cancelled without prejudice or disclaimer. Claim 46 has been added. No new matter has been added. Claims 3, 4, 8, 11, 14-23, 25, 30-39, 41 and 46 are pending in the above-cited application and are again submitted for consideration.

Applicants wish to thank the Examiner for extending the courtesy of an Interview to Applicants' Representative on December 14, 2005. The discussions were helpful and the issues raised during the Interview are incorporated into the discussion below.

The Office Action indicated that claims 3, 4, 8, 11, 25 and 41 were allowed and claims 15, 20, 31 and 36 were indicated as containing allowable subject matter. Claims 14-23 and 30-39 were rejected as discussed below.

Claims 15, 20, 31 and 36 were rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite. The Office Action indicated that those claims were not clear because it could not be determined if those claims were meant to be in Markush group format. As discussed in the Interview on December 14, 2005, Applicants respectfully assert that those claims should NOT be in Markush format since they recite different method steps, as is the case for claim 15, where any of those method steps may be performed to determine the change in the amount of the traffic. The claim is clear in that the methodology, according to claim 15, includes at least one of those steps but does

not limit the claim solely to those method steps. As such, if one of those steps is used to identify the change in the amount of traffic, then that process would fall within the scope of the claim. Therefore, Applicants respectfully assert that claims 15, 20, 31 and 36 are in compliance with U.S. patent practice and the indefiniteness rejection should be reconsidered and withdrawn.

Claims 14-23, 27, 29-39, 43 and 45 were rejected under 35 USC § 103(a) as being unpatentable over *Behtash et al.* (U.S. Patent No. 5,745,480) in view of *Gilhousen et al.* (U.S. Patent No. 5,056,109). The Office Action took the position that *Behtash et al.* disclosed all of the elements of the claimed invention, with the exception of “determining and transmitting the power control command at a frequency based on the change in the amount of traffic.” *Gilhousen et al.* was cited as curing the deficiencies in *Behtash et al.*, and the Office Action took the position that it would have been obvious to a person of ordinary skill in the art to combine *Behtash et al.* and *Gilhousen et al.* to yield the claimed invention. Applicants respectfully traverse the obviousness rejection and submit that the cited references, either alone or in combination, fail to disclose or suggest all the features of any of the presently pending claims.

Claim 14, upon which claims 16-18 are dependent, recites a method of operating a base station in a digital radio link. The base station has a radio connection with a personal station. The method includes identifying a change in amount of traffic received from the personal station. The method also includes determining a frequency of transmission of a power control command based on the change in the amount of traffic.

The method also includes transmitting the power control command to the personal station in accordance with the frequency of transmission.

Claim 19, upon which claims 21-23 are dependent, recites a method of operating a personal station in a digital radio link. The personal station has a radio connection with a base station. The method includes identifying a change in amount of traffic received from the base station. The method also includes determining a frequency of transmission of a power control command based on the change in the amount of traffic. The method also includes transmitting the power control command to the base station in accordance with the frequency of transmission.

Claim 30, upon which claims 32-34 are dependent, recites a base station for having a radio connection with a personal station in a digital radio link. The base station is configured to identify a change in amount of traffic received from the personal station. The base station also is configured to determine a frequency of transmission of a power control command based on the change in the amount of traffic. The base station also is configured to transmit the power control command to the personal station in accordance with the frequency of transmission.

Claim 35, upon which claims 37-39 are dependent, recites a personal station for having a radio connection with a base station in a digital radio link. The personal station is configured to identify a change in amount of traffic received from the base station. The personal station is configured to determine a frequency of transmission of a power control command based on the change in the amount of traffic. The personal station is

configured to transmit the power control command to the base station in accordance with the frequency of transmission.

As discussed in the specification, examples of the present invention enable improved management of resources for transmitting power control commands. The amount of resources desired for power control commands may be reduced when the power control commands are sent less frequently. Applicants respectfully submit that the cited references of *Behtash et al.* and *Gilhousen et al.* fail to disclose or suggest all the features of any of the presently pending claims. Therefore, the cited references fail to provide the critical and unobvious advantages discussed above.

Behtash et al. relates to a multi-rate wireless communications system. *Behtash et al.* describes a system controller 176 that receives a service request from a user terminal specifying a desired data rate and a desired bit error rate. The user terminal calculates the transmission power by estimating the propagation loss and adding the loss to the expected received user signal power. The user terminal transmission power level is continually adjusted due to changes in the received signal power because fading and/or mobility and interference power and other user service requests at the base station. The adjustments are based on power control commands sent by the base station to the user terminal. According to the power control commands, the user terminal increases or decreases the transmitted power by adjusting the control voltage of a power amplifier.

Because of the acknowledged deficiencies of *Behtash et al.*, the Office Action also cites *Gilhousen et al.* However, *Gilhousen et al.* discloses only a very basic power

control command scheme. The power control commands are sent “at a relatively high rate” (col. 7, line 8), “one command per millisecond” (col. 7, line 15), “every millisecond” (col. 7, line 38). The changing signal strengths in *Gilhousen et al.* affect whether the power commands to be sent are increase or decrease power commands. However, there is no disclosure that the signal strength affects the frequency of transmission of power control commands.

On the contrary, *Gilhousen et al.* discloses that in order to be able to cope with Rayleigh fading, power control commands need to be sent all the time. *Gilhousen et al.* teaches that a suitable frequency for sending power control commands is one command per millisecond. Furthermore, even if changes in signal strengths could be considered changes in traffic, as alleged in the rejection, changes in signal strengths cannot be considered changes in amount of traffic.

Gilhousen et al. is thus silent about changing the rate/frequency of the power control commands. *Gilhousen et al.* teaches sending of power control command continuously at a specified rate. *Gilhousen et al.*, therefore, cannot disclose or even suggest changing the frequency of the power control command based on a change in amount of traffic from the party whose transmission power is controlled.

Thus, neither *Behtash et al.* nor *Gilhousen et al.* discloses the transmission of power control commands based on a change in amount of traffic and the rejection of claims 14-23 and 30-39 over the combination of those references must be considered to be improper. In view of the above, Applicants respectfully submit that claims 14-23 and

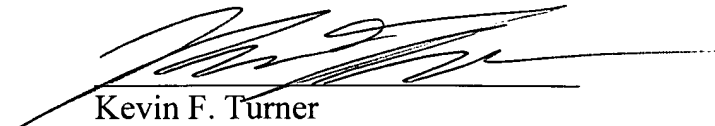
30-39 each recite subject matter which is neither disclosed nor suggested in a combination of *Behtash et al.* nor *Gilhousen et al.*

As noted previously, claims 3, 4, 8, 11, 25 and 41 were indicated as having been allowed. Newly added claim 46 recites subject matter that is similar to that recited in claims 3 and 4 and Applicants respectfully assert that claim 46 should be allowed for at least the same reasons provided for the allowance of claims 3 and 4. It is further submitted that each of claims 3, 4, 8, 11, 14-23, 25, 30-39 and 41 recite subject matter which is neither disclosed nor suggested in the cited prior art. It is therefore respectfully requested that all of claims 3, 4, 8, 11, 14-23, 25, 30-39 and 41 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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